RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/830, 972 ASource: 1FW/6Date Processed by STIC: 01/05/2006

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 01/05/2006
PATENT APPLICATION: US/09/830,972A TIME: 12:26:40

Input Set : E:\10200-003-999.txt

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4 <110> APPLICANT: Schwab, M.
        Chen, M.
 7 <120> TITLE OF INVENTION: NUCLEOTIDE AND PROTEIN SEQUENCES OF NOGO
        GENES AND METHODS BASED THEREON
10 <130> FILE REFERENCE: 10200-003-999
12 <140> CURRENT APPLICATION NUMBER: 09/830,972A
13 <141> CURRENT FILING DATE: 2001-09-24
                                                        Cpg-6)
15 <150> PRIOR APPLICATION NUMBER: PCT/US99/26160
16 <151> PRIOR FILING DATE: 1999-11-05
18 <150> PRIOR APPLICATION NUMBER: 60/107,446
19 <151> PRIOR FILING DATE: 1998-11-06
21 <160> NUMBER OF SEQ ID NOS: 51
23 <170> SOFTWARE: FastSEQ for Windows Version 3.0
25 <210> SEQ ID NO: 1
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27 <212> TYPE: DNA
28 <213> ORGANISM: Rattus sp.
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31 <221> NAME/KEY: CDS
32 <222> LOCATION: (253)...(3741)
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37 eggetegget eggeaegaet eggeetgeet ggeecetgee agtettgeee aacceccaca
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   accgcccgcg actctgagga gaagcggccc tgcggcggct gtagctgcag catcgtcggc
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39
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43
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45
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   gag gac gac gag gac cta gag gaa ctg gag gtg ctg gag agg aag ccc
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Input Set : E:\10200-003-999.txt

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68	110					115					120					125		
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7 4 75				cca Pro														723
76	110	110	110	145	лια	Gry	лла	DCI	150	пси	пια	Giu	110	155	nia	110		
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83				Phe														
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88	190					195					200					205		
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91	Ser	Ser	Gly	Gln		Asp	Phe	Pro	Ser		Leu	Leu	Glu	Thr		Ala		
92					210					215					220			
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95	Ser	Leu	Pro	Ser	Leu	Ser	Pro	Leu		Thr	Val	Ser	Phe	_	GIu	His		
96		i		225			.		230	.				235				1011
98 99				ggt Gly													•	1011
100	GIY	ıyı	240	_	HOII	пец	Ser	245		Ser	Der	Ser	250	_	1111	116		
102	gaa	o daa		,							. ++							
103			act	: tta	aat	. daa	i aci	. r.c:i	: aaa			ı CCa	ı dac	ı add	i aca	aca		1059
	Glι															a aca a Thr		1059
104	Glı		ı Thr					Ser					Glu			a aca a Thr		1059
104 106		Glu 255	Thr	Leu	Asr	Glu	Ala 260	Ser	Lys	Glu	Let	265	Glu	Arg	Ala	a Thr		1059
	aat	255 255 CCa	Thr ttt	Leu gta	Asr aat	Glu aga	Ala 260 gat	Ser) tta	Lys gca	Glu gaa	Let ttt	Pro 265 tca	Glu Glu Glu Glu	Arg	Ala a gaa			
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106 107	aat Asr 270	Glu 255 cca Pro	Thr ttt Phe	Leu gta Val	aat Asr	aga Arg 275	Ala 260 gat Asp	Ser tta Lei	Lys gca Ala	Glu gaa Glu	ttt Phe	Pro 265 tca Ser	Glu G G G Glu	tta	Ala a gaa a Glu	a Thr a tat ı Tyr		
106 107 108	aat Asr 270 tca	Glu 255 cca Pro	Thr ttt Phe	Leu gta Val	Asr aat Asr	aga Arg 275	Ala 260 gat JASE ttt	Ser tta Leu	Lys gca Ala	Glu gaa Glu c tcc	ttt Phe 280	265 tca Ser	Glu Gaaa Glu Ggaa	tta Lei	Ala gaa gaa g tca	a Thr a tat ı Tyr 285		1107
106 107 108 110	aat Asr 270 tca	Glu 255 cca Pro	Thr ttt Phe	Leu gta Val	Asr aat Asr	aga Arg 275 tct	Ala 260 gat JASE ttt	Ser tta Leu	Lys gca Ala	Glu gaa Glu c tcc	ttt Phe 280 cca Pro	265 tca Ser	Glu Gaaa Glu Ggaa	tta Lei	Ala gaa gaa g tca	a tat 1 Tyr 285 a gcc		1107 1155
106 107 108 110 111	aat Asr 270 tca Ser	Glu 255 cca Pro) a gaa Glu	Thr ttt Phe atg	E Leu E gta E Val E gga E Gly	Asr Asr tca Ser 290	aga Arg 275 tct Ser	Ala 260 gat Asr ttt Phe	Ser tta Lev aaa Lys	Lys a gca a Ala a ggo a Gly	g Glu a gaa a Glu c tcc 7 Ser 295	ttt Phe 280 cca Pro	Pro 265 tca Ser aaaa Dys	Glu Glu Glu Glu Glu Gly Gly	tta tta Leu gag Glu	Ala a gaa a Glu g tca a Sen 300 a aaa	tat Tyr 285 a gcc Ala gac		1107
106 107 108 110 111 112 113 114	aat Asr 270 tca Ser	Glu 255 cca Pro) a gaa Glu	Thr ttt Phe atg	gta gta Val ggga Gly gaa Glu	aat Asr tca Ser 290 aac	aga Arg 275 tct Ser	Ala 260 gat Asr ttt Phe	Ser tta Lev aaa Lys	Lys a gca a Ala a ggo a Gly a gaa	gaa Glu Glu E tco Ser 295 a gta	ttt Phe 280 cca Pro	Pro 265 tca Ser aaaa Dys	Glu Glu Glu Glu Glu Gly Gly	tta Leu Glu gag Glu gagt Ser	Ala gaa i Gli g tca i Sei 300 aaa c Lys	tat Tyr 285 gcc Ala		1107 1155
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106 107 108 110 111 112 113 114 115	aat Asr 270 tca Ser ata	255 CCa Pro gaa Glu tta Leu	Thrace The Thrace The Thrace The Thrace Thra	gta gta Val gga gga Gly agaa Glu 305	Asr Asr Ser 290 Asr	aga Arg 275 tct Ser act Thr	Ala 260 gat Asr ttt Phe Lys	Ser tta Let aaa Lys gaa Glu	Lys gca Ala ggc Gly a gaa Glu 310	gaaa Glu gaaa Glu g tcc y Ser 295 a gta i Val	ttti Phe 280 cca Pro	Property Pro	gaa Glu gga Glu gga Gly agg Arg	a tta Lei Gli Gli Gli Ser 315 a caa	Ala gaa gaa g tca g tca 300 aaa Lys	Thr a tat 1 Tyr 285 a gcc Ala 0 a gac 5 Asp		1107 1155
106 107 108 110 111 112 113 114 115 117	aat Asr 270 tca Ser ata	255 CCa Pro gaa Glu tta Leu	Thrift ttt	gta gta Val gga gga Gly agaa Glu 305 tta	Asr Asr Ser 290 Asr	aga Arg 275 tct Ser act Thr	Ala 260 gat Asr ttt Phe Lys	Ser tta Let aaa Lys gaa Glu	Lys a gca a ggo a ggo a gaa a Glu 310 a gco a Ala	gaaa Glu gaaa Glu g tcc y Ser 295 a gta i Val	ttti Phe 280 cca Pro	Property Pro	gaa Glu gaa Glu gga Gly g agg Arg	a tta a tta a gag Glu g agt 315 a caa o Glr	Ala gaa gaa g tca g tca 300 aaa Lys	a Thr a tat 1 Tyr 285 a gcc Ala 0 a gac 5 Asp		1107 1155 1203
106 107 108 110 111 112 113 114 115 117 118	aat Asr 270 tca Ser ata . Ile aaa Lys	Gli 255 CCa CCa Pro CO CCa Gli Gli Gli tta Lei Gaga Gli	Thrift ttt	gta gta Val gga gga Gly agaa Glu 305 tta	Asr aat Asr Ser 290 aac Asr gtt	aga Arc 275 tct Ser act Thr	Ala 260 gat again Asr Phe agg Lys	tta Let aaa Lys gaa Glu gca Ala 325	Lyse Lyse gos gos Gly gos Gly 310 gos Als	gaaa Glu gaaa Glu gaaa Glu Ser 295 a gta 1 Val	ttt Phe 280 CCa Pro a att	Property of the Property of th	gaa Glu a gaa Glu a gga Gly a agg Arg	tta tta Leu gag Glu gagt Ser 315 caa Glr	g Ala a gaa a Glu g tca 300 a aaa Lys a gaa a Glu	Thr a tat 1 Tyr 285 a gcc Ala 0 gac a gac 5 Asp a tca 1 Ser		1107 1155 1203 1251
106 107 108 110 111 112 113 114 115 117 118 119 121	aat Asr 270 tca Ser ata Ile aaa Lys	Gli 255 CCa CCa Pro CO CCa CCa CCa CCa CCa CCa CCa CCa CCa	Thrift Th	gta gta Val gga gga Gly agaa Glu 305 tta Leu	Asr Asr Ser 290 Asr Val	aga Arg 275 tct Ser Act Thr tgt	Ala 260 gat gat Asr Phe Lac Lys agt ser Lys agt aga	Ser tta Let aaa Lys gaa Glu gaa Ala 325	Lyse gos gos Gly a gas Gly 310 gos Als	gaaa Gluce too Ser 295 a gta Val	ttti Phe 280 CCa Pro i attt Ile	Property of Proper	gaa Glu ggaa Glu gga Gly g agg Arg Pro 330	tta tta Leu gag Glu gagt Ser 315 caa Glr	y Ala a gaa a Glu y tca 300 a aaa a Lys a gaa a Glu	Thr tat Tyr 285 gcc Ala gac Asp a gac Ser Ser gac		1107 1155 1203
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106 107 108 110 111 112 113 114 115 117 118 119 121	aat Asr 270 tca Ser ata Ile aaa Lys	Gli 255 CCa Pro O O O O O O O O O O O O O O O O O O O	Thrift Th	gta gga gga gga Glu 305 tta beu	Asr aat Asr Ser 290 aac Asr Val	aga Arg 275 tct Ser act Thr tgt Cys	Ala 260 agat Asr	serio Lei tta Lei aaa Lys gaa Gli Ala 325 gtt y Val	Lyss gcs gcs gcs Gly a gas gcs Gly a gcs Gly a gcs Gly a gcs Gly	gaa Glu gaa Glu Ser 295 a gta Val C ctt	ttti Phe 280 CCa Pro att Ile	Property of the Property of th	gaa Glu a gaa Glu a gga a Gly Arg Arg 330 a aag a Lys	tta tta Leu gag Gli gagt Sen 315 a caa Caa Caa	A Ala a gaa a gaa a tca 300 a aaa bys a gaa a gaa	Thr tat Tyr 285 gcc Ala gac Asp a gac Ser Ser gac		1107 1155 1203 1251

Input Set : E:\10200-003-999.txt

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131	ıyı	AIa	Asp	FIIC	370	PIO	FIIE	Giu	GIII	375	тър	Giu	vai	цуъ	380	TIIL	
133	+ - +	~~~	~~~	~~ +		~~+	~+~	a+ a	~~+			~~+	-	~+~		- ~t	1442
							gtg										1443
134 135	TÀT	GIU	GIY	385	Arg	Asp	Val	ьеи	390	Ald	Arg	AIa	ASII	395	GIU	ser	
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138			_	_		_	Leu	_	_	_	_				_		1491
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146						-	Ser		_	_							1507
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172	_	_				_	att	_		_				_	_	_	1923
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Input Set : E:\10200-003-999.txt

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197	-						Ala				_						
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201					-	_	Phe		_	_	-	-	-		_		
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205							Cys	-				-					
206	670	-1-				675	-1-				680			-1-		685	
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217	_		_		_	-	Leu		-	_		-					
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222		735					740					745					
224	qaa	ata	tct	gag	aca	qta	gcc	caq	cac	aaa	gag	gag	aqa	ctt	aqt	qcc	2547
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229			_				Lys							_			
230					770	-	-		-	775					780		
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234				785		-			790					795			
236	aaa	aag	gag	aaa	att	tct	ttg	caa	atg	gaa	gag	ttt	aat	act	gca	att	2691
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Input Set : E:\10200-003-999.txt

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264		_					gta						-				3027
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266	910					915					920					925	
268	_		_	_	_		cag		_			_		_			3075
269	Val	Ser	Ala	Leu		Pro	Gln	Thr	Glu		Gly	Ser	Ile	Val	-	Ser	
270					930					935					940		
272				_		_	gca	-						_			3123
273	Lys	Ser	Leu		Lys	Glu	Ala	Glu	_	Lys	Leu	Pro	Ser	_	Thr	GLu	
274				945					950					955			
276							tca										3171
277	ьуs	GIU	_	Arg	Ser	Leu	Ser		Val	Leu	ser	Ala		ьeu	ser	ьуs	
278			960			4		965					970				2010
280							ctc										3219
281	Thr		vaı	vai	Asp	ьeu	Leu	Tyr	Trp	Arg	Asp		ьys	гуѕ	Thr	GIY	
282		975		~~+			980					985					2267
284							tta										3267
285 286	99(Pile	GIY	Ala	999	Leu	Pne	ьeu	ьeu	1000		ьeu	1111	vai	1005	
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289	_		_	_	_	_	gcc Ala			_	_	-	_		_		3313
290	DCI	116	vai	DCI	1010		AIA	ı yı	116	1019		ΑΙα	пеа	пец	1020		
292	act	atc	agc	+++			tat	aad	aac			cad	act	atc			3363
293							Tyr										3303
294			501	1025	_		-1-	_,_	1030			V		103		-10	
296	t.ca	gat	gaa			cca	ttc	agg			tta	gaa	tet			act.	3411
297							Phe										
298			1040	_				1045					1050				
300	ata	tca			tta	att	cag			aqt	aat	tct			qqt	cat	3459
301							Gln										
302		1059					1060	-	•			1069			-		
304	gtg	aac	agc	aca	ata	aaa	gaa	ctg	agg	cgg	ctt	ttc	tta	gtt	gat	gat	3507
305			_				Glu	_						_	_	_	
306	1070)				1079	5		_	_	1080)			_	1085	
308	tta	gtt	gat	tcc	ctg	aag	ttt	gca	gtg	ttg	atg	tgg	gtg	ttt	act	tat	3555
309							Phe										
310					1090	ַ כ				1095	5				1100)	
312	gtt	ggt	gcc	ttg	ttc	aat	ggt	ctg	aca	cta	ctg	att	tta	gct	ctg	atc	3603
313	Val	Gly	Ala	Leu	Phe	Asn	Gly	Leu	Thr	Leu	Leu	Ile	Leu	Ala	Leu	Ile	
314				1109	5				1110)				1119	5		
316	tca	ctc	ttc	agt	att	cct	gtt	att	tat	gaa	cgg	cat	cag	gtg	cag	ata	3651
317	Ser	Leu	Phe	Ser	Ile	Pro	Val	Ile	Tyr	Glu	Arg	His	Gln	Val	Gln	Ile	
318			1120)				1125	5				1130)			
320	gat	cat	tat	cta	gga	ctt	gca	aac	aag	agt	gtt	aag	gat	gcc	atg	gcc	3699

Input Set : E:\10200-003-999.txt

Output Set: N:\CRF4\01052006\1830972A.raw

Please Note:

*

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 2//
Seq#:6; Xaa Pos. 2,5
Seq#:29; Xaa Pos. 187,188,189,190,221,328,477
Seq#:30; Xaa Pos. 469
Seq#:35; N Pos. 110
Seq#:36; N Pos. 91
Seq#:37; N Pos. 170,275
Seq#:38; N Pos. 371,444,474,501,506,524,544,561,580,614,620
Seq#:39; N Pos. 149,198,207,246,312,317
Seq#:42; N Pos. 383,402,421,433,441
Seq#:47; N Pos. 3,6,12,15,18
Seq#:48; N Pos. 3,6,9,12,15
Seq#:49; N Pos. 3,6,9,12,15
Seq#:50; N Pos. 3,6,9,12,15,18,21
Seq#:51; N Pos. 9,12,24

VERIFICATION SUMMARY

DATE: 01/05/2006 PATENT APPLICATION: US/09/830,972A TIME: 12:26:41

Input Set : E:\10200-003-999.txt

```
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:525 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:176
L:977 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:208
L:991 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:320
L:1009 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:464
L:1169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:464
L:1358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:60
L:1375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:60
L:1395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:120
L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:240
L:1416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:360
L:1417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:420
L:1418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:480
L:1419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:540
L:1420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:600
L:1435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:120
L:1436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:180
L:1437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:240
L:1438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:300
L:1483 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:360
L:1484 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:420
L:1545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:1562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:1579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:1596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:1614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
```